Patents by Inventor Dmitry Kosynkin

Dmitry Kosynkin (Google Scholar)

Dmitry Kosynkin (American/Patriot) · 2nd
Chief Technology Officer at Caviroe Company
Houston, Texas, United States · Contact info

500+ connections

10 mutual connections:

Connect Message More

Caviroe Company

University of Houston

Extremely generic summary for a CTO with 7 patents and 20+ published papers.

About

Highly motivated and dynamic professional with more than 10 years of experience designing and leading diverse R&D projects in nanotechnology. Skilled communicator and engaging leader able to build collaborative relationships with multidisciplinary peers to facilitate research and motivate teams to exceed objectives. Analytical and organized as well as highly adaptable, proactive, and pragmatic in approach to solving complex problems. Uniquely equipped for success in international environments with fluency in both English and Russian.

Childish commenting.

Activity

1,082 followers

We get to hear from a top-tier scientist with a single peer-reviewed article that...
Dmitry replied to a comment

Ciprian Verdes Do the same experiment with your own exhaust...
Dmitry replied to a comment

Watching that clown read ghost-written notes cracked me up. The baby cwieeeed...
Dmitry commented

Christopher Yi Next time - using your favorite search engine and reading...
Dmitry replied to a comment

First person “I”

Experience

Chief Technology Officer
Caviroe Company
Feb 2020 – Present · 1 yr 6 mos
Houston, Texas, United States

Consultant
Quidnet Energy
Oct 2020 – Feb 2021 · 5 mos
Houston, TX

Research Scientist
Rice University
Mar 2017 – Oct 2020 · 3 yrs 8 mos
Houston, Texas Area

I studied purification and chemical modification of boron nitride nanotubes to provide access to light-weight, oxidation resistant and mechanically strong insulating fibers.

Demoted from Engineer II to Engineer I and stayed 4 years.

Saudi Aramco
6 yrs 4 mos

Petroleum Engineer I
Jul 2012 – Nov 2016 · 4 yrs 5 mos
Dhahran Al-Janoub Governorate, Saudi Arabia

Highlights Include:

★Spearheaded full lifecycle of project to build world-class nanotechnology laboratory from ground up, including purchase of scientific instrumentation, installation, and end-user ...see more

Petroleum Engineer II
Aug 2010 – Jun 2012 · 1 yr 11 mos
Dhahran, Saudi Arabia

.

Senior Research Scientist
Rice University
2007 – 2010 · 3 yrs

Highlights Include:

★Conceptualized and created new method for CNT assisted drug delivery and method for mitigating radiation damage effectively with CNTs. ...see more

Education

University of Houston
Ph.D., Organic Chemistry
1992 – 1997

Skills & endorsements

Nanotechnology · 28

Endorsed by **Ayrat Dimiev and 1 other who is highly skilled at this**

Endorsed by **7 of Dmitry's colleagues at Rice University**

Characterization · 22

Endorsed by **Alexander Kuznetsov and 1 other who is highly skilled at this**

Endorsed by **7 of Dmitry's colleagues at Rice University**

Spectroscopy · 13

Endorsed by **5 of Dmitry's colleagues at Rice University**

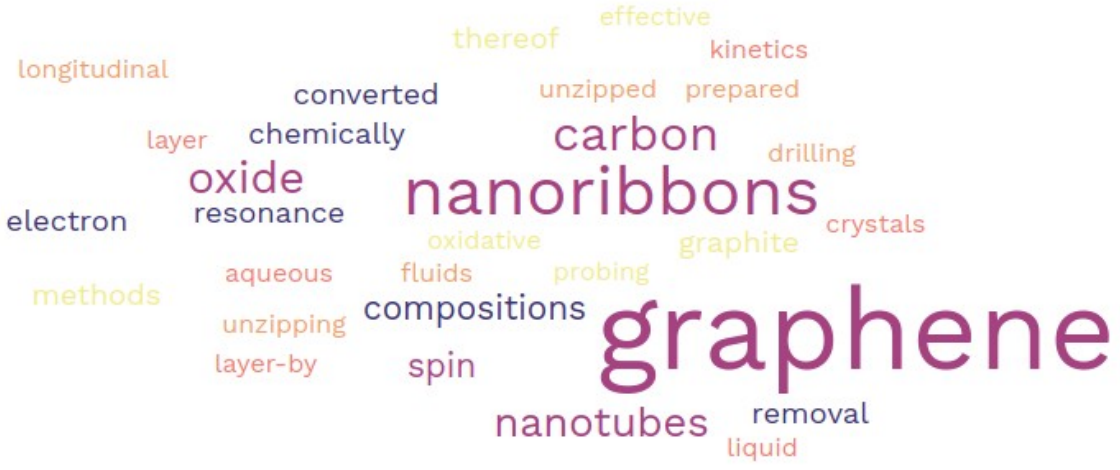
Accomplishments

36 Publications

Magnetic defects in chemically converted graphene nanoribbons: electron spin resonance investigation. • Graphene Nanoribbons as an Advanced Precursor for Making Carbon Fiber • Graphene oxide for effective radionuclide removal • Spin Dynamics and Relaxation in Graphene Nanoribbons: Electron Spin Resonance Probing • Ferromagnetism in Graphene Nanoribbons: Split versus Oxidative Unzipped Ribbons • Pristine Graphite Oxide • Graphene Oxide as a High-Performance Fluid-Loss-Control Additive in Water-Based Drilling Fluids • Paramagnetic centers in graphene nanoribbons prepared from longitudinal unzipping of carbon nanotubes • Liquid crystals of aqueous, giant graphene oxide flakes • Layer-by-Layer Removal of Graphene for Device Patterning • Unzipped graphene nanoribbons as sensitive O2 sensors: Electron spin resonance probing and dissociation kinetics • Preparation of Large Area Transparent Electrodes Using Non-Functionalized Graphene Nanoribbons • ighly Conductive Graphene Nanoribbons by Longitudinal Splitting of Carbon Nanotubes Using Potassium Vapor • Graphene Nanoribbon Devices Produced by Oxidative Unzipping of Carbon Nanotubes • Effective Drug Delivery, In Vitro and In Vivo, by Carbon-Based Nanovectors Noncovalently Loaded with Unmodified Paclitaxel • Improved Synthesis of Graphene Oxide • Spontaneous high-concentration dispersions and liquid crystals of graphene • Corrugation of Chemically Converted Graphene Monolayers on SiO2 • Kinetics of Diazonium Functionalization of Chemically Converted Graphene Nanoribbons • Lower-Defect Graphene Oxide Nanoribbons from Multiwalled Carbon Nanotubes...

9 Patents

Dissolution of graphite, graphite and graphene nanoribbons in superacid solutions and manipulation thereof • Adsorption of actinides in cationic form from aqueous solutions • Highly oxidized graphene oxide and methods for production thereof • Layer-by-layer removal of graphene • Graphene nanoribbons prepared from carbon nanotubes via alkali metal exposure • Water-soluble carbon nanotube compositions for drug delivery and medicinal applications • Methods for preparation of graphene nanoribbons from carbon nanotubes and compositions, thin films and devices derived therefrom



275 words used.

"Graph-" is used 35 times ("Graphene Oxide" 14 times)

"Nano-" 22 times.

Starts with "magnetic"

PFIZER WHISTLEBLOWER KAREN KINGSTON – VACCINE INGREDIENTS

Dmitry Kosynkin (American/Patriot) • 2nd
Chief Technology Officer at Caviroe Company
18h

It hilarious to watch 2 ignoramuses discussing stuff they haven't a slightest idea about. I'll point out the most idiotic pearls of stupidity for the uninitiated:

"... and graphene oxide which is 4,000 time stronger than titanium, can withstand 1,700 F temperatures, is an excellent conductor of electricity, and can host a magnetic field"
Graphene oxide decomposes at temperatures in excess of 250F. It is a wide-band semiconductor very poorly conducting electricity.
Magnetic field is not a hotel guest to be hosted, so it isn't. Graphene oxide can't retain magnetization.

"graphene oxide .... it is poisonous to humans"
There's no evidence of GO toxicity.

"the graphene oxide in the vaccines is neutrally charged (inactive), however if/when it becomes positively charged, such as by electromagnetic radiation (radio frequency, such as wireless devices, wireless networks such as 5G, etc.), it will annihilate anything it comes into contact with"
Graphene oxide is NEGATIVELY charged in its native state due to the presence of carboxylate groups. Exposure to any range of electromagnetic radiation does NOT affect this charge.

Christopher Yi • You
eDiscovery Technology Project Manager at Fox Rothschild LLP
16h (edited)

Next time - citations\references might help your argument.

"Together, these results demonstrate that particle size, particulate state, and oxygen content/surface charge of graphene have a strong impact on biological/toxicological responses to red blood cells."

Cytotoxicity of graphene oxide and graphene in human erythrocytes and skin fibroblasts

https://experts.umn.edu/en/publications/cytotoxicity-of-graphene-oxide-and-graphene-in-human-erythrocytes

"As shown in Fig. 1c, the resultant suspension was placed on the Heater-stirrer at 200 °C until the solution was evaporated and graphene flakes remained. In this case, the magnetic field of magnet in heater-stirrer is considered as an external magnetic field source."

Observation of magnetic domains in graphene magnetized by controlling temperature, strain and magnetic field

https://www.nature.com/articles/s41598-020-78262-w

"The research, funded by the National Science Foundation (NSF) and published online in the journal Nature Nanotechnolgy, reveals that graphene conducts electricity at room temperature with less intrinsic resistance than any other known material."

Is Graphene the New Silicon?

https://www.nsf.gov
/news/news_summ.jsp?cntn_id=111341&org=NSF

Dmitry Kosynkin (American/Patriot) • 2nd
Chief Technology Officer at Caviroe Company
15h

Christopher Yi Next time - using your favorite search engine and reading much slower could help you understand the topic enough to form a somewhat qualified opinion.
The toxicity study the first article refers to is done in a severely simplified system that has very little to do with the conditions encountered in a living organism. The platelets of chemically modified graphene IMMEDIATELY form very strong complexes with plasma proteins. In case of graphene oxide, the complexes are formed irreversibly.
The second article is NOT about graphene oxide. It's about graphene (in reality, poorly exfoliated, multi-layer graphite). Graphene is a zero-band semiconductor, while graphene oxide is a wide-band semiconductor. They have very different physical and chemical properties ENTIRELY.
Unlike you, I have a wee bit of experience working with both of these things.

Apart from an attempt to assert intellectual superiority, in a crass, juvenille manner no less, there are many incorrect statements made that are disproved very easily.

[D.K (American Patriot): Chief Technology Office response to Karen Kingston interview]

It hilarious to watch 2 ignoramuses discussing stuff they haven't a slightest idea about. I'll point out the most idiotic pearls of stupidity for the uninitiated:

"... and graphene oxide which is 4,000 time stronger than titanium, can withstand 1,700 F temperatures, is an excellent conductor of electricity, and can host a magnetic field"

Graphene oxide decomposes at temperatures in excess of 250F.

> **Graphene oxide to enable heat-resistant and high-strength resin for lightweight aircraft and rockets**
>
> "This research included the achievement of a *high level of thermal resistance* due to the addition of a graphene oxide derivative to a universal and cheap epoxy resin"
>
> **Physicists show unlimited heat conduction in graphene**
>
> "In the micro- and nano-electronics, heat is the limiting factor for smaller and more efficient components. Therefore, materials with virtually unlimited thermal conductivity hold an enormous potential for this kind of applications. Materials with outstanding electronic properties that are self-cooling too, as graphene might be, are the dream of every electronics engineer."

It is a wide-band semiconductor very poorly conducting electricity.

> **Wide-bandgap semiconductors**
>
> "Conventional semiconductors like silicon have a bandgap in the range of 1 - 1.5 electronvolt (eV), whereas wide-bandgap materials have bandgaps in the range of 2 - 4 eV.
>
> Wide-bandgap semiconductors… operate at much higher voltages, frequencies, and temperatures than conventional semiconductor materials like silicon… key component used to make LEDs and lasers… radio frequency applications, notably military radars… one of the *leading contenders for next-generation devices for general semiconductor use*."
>
> **Five Applications Of Graphene Oxide**
>
> "Such electrical and mechanical properties make it helpful in developing transparent and flexible *conductors*, field-effect transistors, electrical and optical sensors, fluorescence quenchers… Metal nanoparticles can enhance… graphene oxide… Graphene oxide is increasingly being used in *nanomedicine*. The functionalized graphene oxide sheets and nanoparticles (NPs) find use in *delivery systems*, tissue engineering..."

Magnetic field is not a hotel guest to be hosted, so it isn't. Graphene oxide can't retain magnetization.

> **Observation of *magnetic domains* in graphene magnetized by controlling temperature, strain and magnetic field**
>
> "...the resultant suspension was placed on the Heater-stirrer at 200°C until the solution was evaporated and graphene flakes remained. In this case, the magnetic field of magnet in heater-stirrer is considered as an external magnetic field source."

"graphene oxide .... it is poisonous to humans"

There's no evidence of GO toxicity.

> **Cytotoxicity of graphene oxide and graphene in human erythrocytes and skin fibroblasts**
>
> "Together, these results demonstrate that particle size, particulate state, and oxygen content/surface charge of graphene have a strong impact on biological/toxicological responses to red blood cells."

"the graphene oxide in the vaccines is neutrally charged (inactive), however if/when it becomes positively charged, such as by electromagnetic radiation (radio frequency, such as wireless devices, wireless networks such as 5G, etc.), it will annihilate anything it comes into contact with"

Graphene oxide is NEGATIVELY charged in its native state due to the presence of carboxylate groups. Exposure to any range of electromagnetic radiation does NOT affect this charge.

> **Carboxylated reduced graphene oxide**
>
> "Carboxylated reduced graphene oxide is a specially designed dispersible form of reduced graphene oxide (rGO)… making it a versatile starting material for… *biosensors* and strong *nanocomposites*."
>
> **The reduction of graphene oxide**
>
> "Graphene… can be produced by... the reduction of graphene oxide (GO)… GO has two important characteristics: (1) it can be produced using *inexpensive* graphite... (2) it is highly hydrophilic… to facilitate the assembly of macroscopic structures by simple and cheap solution processes… important to the large-scale uses of graphene"
>
> **Graphene oxide-ferrite hybrid framework as enhanced broadband absorption in gigahertz frequencies**
>
> The nanocomposite coating showed *ultra-high absorptivity* over the frequency… numerous practical applications as radar absorbing materials (RAM), stealth technology, electromagnetic shielding, and radiated electromagnetic interference (EMI) management…
>
> **Potential of graphene-based materials to combat COVID-19: properties, perspectives, and prospects**
>
> "Over the past few years, graphene and graphene-related materials (GRMs) have attracted huge attention of the researchers owing to their wide spectrum properties such as *high surface area*, *high electrical mobility and conductivity*, *excellent mechanical*, *electrochemical*, and *piezoelectric* properties...
>
> … the *chemical reduction of GO* is performed commonly… resultant *reduced graphene oxide (rGO)* demonstrates considerably *improved* electrical properties than GO. This is attributed to a reduced amount of oxygen... the electrical properties of rGO remain *slightly* inferior to pristine graphene...
>
> … GO and its derivatives have wide-spectrum antiviral properties… Particularly, for the SAR-CoV-2 virus… GO/*rGO*-SO_3 coatings enriched with copper *nanoparticles*/copper ions...
>
> *7. Graphene based on gene-editing technology (CRISPR/Cas)*
>
> (CRISPR)-associated nuclease (Cas) proteins, guided by single standard RNA, are emerging potential tools for sequence-specific targeting and detection… a graphene-based field-effect transistor that uses CRISPR technology… for the label-free digital detection of a target DNA sequence within intact genomic material… In this label-free biosensor device, the graphene is *functionalized*… which interacts with its target sequence by scanning the complete genomic sample, *unzipping* the double helix *connecting upstream*... until it recognizes and binds to the target DNA sequence that is complementary to the single-guide RNA molecule... The *electrical signal* generated by the binding of the targeted DNA sequence… is *recorded* via a handheld device *without any amplification*.

[I responded with two links from above, magnetization and toxicity, prefaced by, "Next time - citations\references might help your argument."]

Next time - using your favorite search engine and reading much slower could help you understand the topic enough to form a somewhat qualified opinion.

The toxicity study the first article refers to is done in a severely simplified system that has very little to do with the conditions encountered in a living organism. The platelets of chemically modified graphene IMMEDIATELY form very strong complexes with plasma proteins. In case of graphene oxide, the complexes are formed irreversibly.

The statement about platelets forming complexes with plasma proteins is not relevant, neither is the follow up statement about the complex formed being irreversible. Graphene needs to be oxidized to create GO, but graphene platelets are created without the initial stage of oxidation per the study below. Better yet, graphene platelets have a toxic influence on cells.

In vitro evaluation of the effects of graphene platelets on glioblastoma multiforme cells

"Recently, investigations have studied the effects of functionalized graphene materials on living organisms… different graphene materials may have different effects on the organism. The majority of the studies have focused on graphene oxide… there have been no biological studies of graphene platelets (GPs), which are produced by… direct exfoliation of graphite, *without the initial stage of oxidation*…

In the present research, we hypothesized that GPs also have a toxic influence on glioma cells."

Evaluation of Graphene Oxide Induced Cellular Toxicity and Transcriptome Analysis in Human Embryonic Kidney Cells

"Furthermore, our RNA-Seq analysis revealed that HEK293 cells exposed to graphene oxide significantly altered the expression of genes... Moreover, graphene oxide exposure perturbed the expression of key transcription factors… by regulating their downstream genes."

Graphene-Based Nanomaterials Toxicity in Fish

"… graphene-based nanoparticles… GPNs are able to cross the cellular barriers successfully, entered into the cells, and are able to interact with almost *all the cellular sites* including the plasma membrane, cytoplasmic organelles, and nucleus. Their interaction with DNA creates more potential threats to both the genome and epigenome."

Toxicity of graphene-family nanoparticles: a general review of the origins and mechanisms

"In addition, several typical mechanisms underlying GFN toxicity have been revealed, for instance, physical destruction, oxidative stress, DNA damage, inflammatory response, apoptosis, autophagy, and necrosis."

The second article is NOT about graphene oxide. It's about graphene (in reality, poorly exfoliated, multi-layer graphite).

Another weak argument. The follow up about "poor" exfoliation and "multi layer" are also incorrect per the article below.

Graphene oxide: the mechanisms of oxidation and exfoliation

We demonstrated that the graphite did not need to be oxidized to such a deep degree… the obtained graphite oxides (GTOs) could be fully exfoliated to single layers with high thermal stability… results confirmed that the GOs... were fully exfoliated to uniform single layers… important for efficient exfoliation of GTO to GO and large-scale production of graphene.

Realization of ferromagnetic graphene oxide with high magnetization by doping graphene oxide with nitrogen

"Clearly, our findings can offer the easy realization of ferromagnetic GO with high magnetization, therefore, push the way for potential applications in *spintronic* devices."

Magnetic properties of graphene oxide functionalized with "Au" and "Fe2O3" nanoparticles: A comparative study

Reduced graphene oxide (r-GO) nanocomposites are very useful for different applications such as magnetic storage media and bio-imaging/biomedical applications and recently have been found to be very useful in electronic and magnetic resonance imaging contrast agent where r-GO was functionalized with silica coated gold and iron oxide nanoparticles.

They have very different physical and chemical properties ENTIRELY.

Manufacturing Graphene Oxide

..the search for a scalable synthesis route to graphene led many to consider GO as a possible solution. The relationship between the two 2D materials allows graphene oxide to be… *very similar* to graphene, known as reduced graphene oxide (rGO)…. the structure is not perfect. The defects in the material lead to *slightly* different properties in rGO compared to graphene, making the material interesting in its own right. While not a perfect substitute, rGO is *very similar* to graphene and acts as a *suitable replacement* in many applications.

Unlike you, I have a wee bit of experience working with both of these things.

Another interaction regarding the same topic (same thread).

Boris Chikvashvili • 2nd — 18h (edited)
President Antisopitalist

What else is new. Science, HA. Yes, if you call that a science , i have the bridge to sell you in NYC 😀 they are experimenting and will do so endlessly as they know nothing of what they are doing can cause in the body. As i said, GOD made sure humans will not defeat him creating life. Death they may , of course. Life. , they will neve ...see more

Like · 4 | Reply · 8 Replies

Dmitry Kosynkin (American/Patriot) • 2nd — 3h
Chief Technology Officer at Caviroe Company

This ignorant babbling has nothing to do with any science.

Like | Reply

Boris Chikvashvili • 2nd — 2h (edited)
President Antisopitalist

So, when did you last encounter QUATUM UNCERTAINTY PRINCIPLE(QUP). Will you be ready to discuss science or throw one liners. So you understand where i come from. QUP states. In the quantum world we cannot measure, let alone predict outcomes in single cases, though sta ...see more

Like | Reply

Boris Chikvashvili • 2nd — 2h (edited)
President Antisopitalist

stated himself. QUANTUM PHYSICS / UNCERTAINT ...see more

Like | Reply

Dmitry Kosynkin (American/Patriot) • 2nd — 2h
Chief Technology Officer at Caviroe Company

Boris Chikvashvili Please seek professional help.

Like | Reply

It's as if the responses are programmed to respond to certain keywords with a different manner than my interaction.

Boris Chikvashvili • 2nd — 2h (edited)
President Antisopitalist

Dmitry Kosynkin Thank you. You surely are not professional worth visiting, you cannot even put two sentences together. Chao "PATRIOT"

Like | Reply

Dmitry Kosynkin (American/Patriot) • 2nd — 59m
Chief Technology Officer at Caviroe Company

Boris-batono, you seem to have skipped your head meds again. Why did you get kicked out of graduate school? Mental breakdown, perhaps?

Like | Reply

CTO with 8 patents and 20+ published papers?

Boris Chikvashvili • 2nd — 25m (edited)
President Antisopitalist

You are looking for law suite. I am honor graduate of 3 universities. All across the earth

Like | Reply

[Lastly, another interesting comment from a different thread]

Dmitry Kosynkin liked **Chris DeArmitt - PhD, FRSC, FIMMM**'S comment on this

Seth Darling • 3rd+
Scientist; Author; Innovator; Science communicator and leader
1d •

Microplastics. They're freakin' everywhere. That means right here in the Great Lakes, too. Sure, our drinking water systems separate some of this stuff from our supply, but that doesn't mean we aren't impacted. ...see more

Great Lakes microplastics pollution is showing up in fish, birds — and your beer glass

chicagobusiness.com • 1 min read

64 · 42 comments

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Add a comment...

Michael Stanley Gallisdorfer • 2nd
Global Water Water Science Water Technology | North Americ... 1d

Are microplastics dangerous Seth Darling?

Like · 1 | Reply · 18 Replies

Load previous replies

Chris DeArmitt - PhD, FRSC, FIMMM • 2nd
World-Class Plastic Materials Consultant, Environmental Expe... 1d

Seth Darling 1. There is no evidence of harm
https://plasticsparadox.com/microplastic-myths/
2. Scientists and the media have exaggerated this to get attention and money "The results show that most scientific studies (67%) frame microplastics risks as hypothetical or uncertain, while 24% present them as established. In contrast, most media articles reporting on microplastic impacts (93%) imply that risks of microplastics exist and harmful consequences are highly probable."
https://onlinelibrary.wiley.com/doi/epdf/10.1002/gch2.201900010
3. Scientists have designed unrealistic experiments to get falsely bad results

Like · 2 | Reply

[P.S The account has 50+ likes in the past 24 hours, many supporting the opposition of vaccines, etc.]